

1-28-05

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Thomas E. Barta, et al.

Serial No:

10/730,403

Filed:

December 8, 2003

For:

Aromatic Sulfone Hydroxamic Acids and Their Use as Protease Inhibitors

Confirmation No:

4538

Group Art Unit:

1625

Examiner:

TBA

Attorney Ref:

3124/9A/US

Pfizer Ref:

31134A/USA

HDP Ref:

6794-000017/DVE

January 27, 2005

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents ¹ P.O. Box 1450 Alexandria, VA 22313-1450

Dear Madam/Sir:

To comply with 37 CFR §1.97 and §1.98, Applicants submit the enclosed Form PTO-1449.

In accordance with MPEP §609 and §707.05(b), Applicants respectfully request that each document listed be given thorough consideration, and that the Examiner cite each document of record in the prosecution history of the present application by initialing the Form PTO-1449 next to each document. Applicants request such initialing even if the Examiner does not consider: (1) a document to be sufficiently pertinent to use in a rejection; (2) a document to be prior art for any reason; or (3) that the guidelines for citation have been fully complied with respecting a particular document. Applicants make this request so that each document becomes cited on the face of a patent issuing on the present application.

Applicants submit this information disclosure statement in compliance with the duty to disclose information material to patentability under 37 CFR §1.5, but by listing such documents are not admitting that such documents are necessarily relevant or prior art. Applicants intend no representation that the listed documents represent the results of a complete search. Applicants anticipate that the Examiner, in the normal course of examination, will make an independent search consistent with 37 CFR §1.104(a) and §1.106(b), and, in the course of such search, will

Information Disclosure Statement Appl. No. 10/730,403 January 27, 2005

review for relevance every document listed on the attached form even if not initialed.

Most references cited in this information disclosure statement are U.S. patents or U.S. patent application publications, or were previously cited or submitted to the Office and considered in the parent application, U.S. Patent Application Serial No. 09/989,943 (filed November 21, 2001, and issued as U.S. Patent No. 6,683,093 on January 27, 2004). Copies of those references are therefore not being provided in accordance with 37 C.F.R. §1.98(d) and MPEP §609 Part III(A)(2). Applicants, however, will provide copies of such references upon request from the Examiner. The references that are enclosed with this information disclosure statement are identified as being enclosed on the Form 1449.

This patent is a divisional of U.S. Patent Application Serial No. 09/989,943, which, in turn, is a continuation-in-part to U.S. Patent Application Serial No. 09/570,731 (Patent No. 6,750,228; filed May 12, 2000), which, in turn, claims priority to U.S. Patent Application Serial Nos. 09/311,837 (filed May 14, 1999) and 09/256,948 (filed February 24, 1999; abandoned), which, in turn, claim priority to U.S. Patent Application Serial Nos. 09/191,129 (filed November 13, 1998; abandoned) and 09/186,410 (filed November 5, 1998; abandoned). Applicants presume that the Examiner has access to the file histories for these applications. Applicants further presume that the Examiner is aware of the issues raised and the scope of claims in those cases, and will take them into account when examining this patent application. Upon request from the Examiner, Applicants can provide copies of the substantive Office actions or any other information relating to those cases, to the extent Applicants have such information in their possession.

Applicants make no representation as to the accuracy of any translation provided with this Information Disclosure Statement.

Applicants request early and favorable consideration.

* * * * * * *

Applicants believe that they do not owe any fee in connection with this information disclosure statement. If, however, Applicants do owe any such fee(s), the Commissioner is hereby authorized to charge the fee(s) to Deposit Account No. **08-0750**. In addition, if there is ever any other fee deficiency or overpayment under 37 C.F.R. §1.16 or §1.17 in connection with

Information Disclosure Statement Appl. No. 10/730,403 January 27, 2005



this patent application, the Commissioner is hereby authorized to charge such deficiency or overpayment to Deposit Account No. 08-0750.

The Examiner is requested to call the undersigned if any questions arise that can be addressed over the phone to expedite examination of this application.

Respectfully submitted,

David M. Gryte, PTO Reg. No. 41,809

Harness, Dickey & Pierce 7700 Bonhomme, Suite 400 St. Louis, Missouri 63105

(314) 726-7500 (tel) (314) 726-7501 (fax)

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8

I certify that this correspondence is being deposited with the U.S. Postal Service on January 27, 2005 with sufficient postage as first class mail (including Express Mail per MPEP § 512), and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

DMG/JPG/PML enclosures

PTO/SB/21 (04-04) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL		Application Number	10/730,403
TRANSMITTAL		Filing Date	December 8, 2003
FORM	Ţ	First Named Inventor	Thomas E. Barta et al.
(to be used for all correspondence after initia	ıl filing)	Art Unit	1625
	Ī	Examiner Name	TBA
Total Number of Pages in This Submission	39	Attorney Docket Number	3124/9A/US; Pfizer Ref: 31134A/U
	ENCLO	SURES (check all that apply)	
Fee Transmittal Form	☐ Drawing		After Allowance Communication to Technology Center (TC)
Fee Attached	Licensir	ng-related Papers	Appeal Communication to Board of Appeals and Interferences
Amendment / Reply	Petition		Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
After Final	Provision	n to Convert to a onal Application	Proprietary Information
Affidavits/declaration(s)	Power of Change	of Attorney, Revocation e of Correspondence Address	☐ Status Letter
Extension of Time Request	Termina	al Disclaimer	Other Enclosure(s) (please identify below):
Express Abandonment Request	_	st for Refund mber of CD(s)	Form PTO-1449; 15 References; Return Receipt Postcard
Information Disclosure Statement		· · -	Trought Troublet Total
Certified Copy of Priority Document(s)	Remark	ks	<u> </u>
Response to Missing Parts/ Incomplete Application			
Response to Missing Parts under 37 CFR 1.52 or 1.53			
SIGNA	TURE OF A	APPLICANT, ATTORNEY, O	PR AGENT
Firm or Individual name Harness, Dickey & I	Pierce, P.L.C	Attorney Name David M. Gryte	Reg. No. 41,809
Signature	1/1	A	
Date January 27, 2005			
C	ERTIFICAT	E OF TRANSMISSION/MAI	ILING

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Typed or printed name

Signature

David M. Gryte

Express Mail Label No.

Date

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

EV 327050998 US

January 27, 2005

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 4

ATTORNEY DOCKET NO.	SERIAL NO.
3124/9A/US (Pfizer Ref. 31134A/USA)	10/730,403
APPLICANT	
Thomas E. Barta et al.	
FILING DATE	GROUP
December 8, 2003	1625

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		4,595,700	6/17/1986	Donald et al.	514/616	
. 2.		5,932,595	8/3/1999	Bender et al.	514/317	
3.		6,013,649	1/11/2000	Freskos et al.	514/237.8	
4.	-	6,300,514	10/9/2001	Takahashi et al.	560/17	
5. (Office action and notices of allowance enclosed)		6,541,489, including 12/17/01 Office action, 5/16/02 notice of allowance, and 11/08/02 notice of allowance	4/1/2003	Barta et al.	514/330	7/31/2000
6. (Office action and notice of allowance enclosed)		6,689,794, including 4/11/03 Office action and 5/28/03 notice of allowance	2/10/2004	Barta et al.	514/318	05/10/2002
7. Office action and notice of allowance enclosed)		6,750,233, including 11/18/02 Office action and 5/09/03 notice of allowance	6/15/2004	Barta et al.	514/336	09/17/2001
8. (pending claims enclosed)		Publ. No. 2004-0024024 (Appl. No. 10/291,983), including pending claims		Freskos et al.	514/326	11/12/2002
9. (notice of allowance and allowed claims enclosed)		Publ. No. 2004-0048852 (Appl. No. 10/337,942), including allowed claims and 2/13/04 notice of allowance		Barta et al.	514/317	01/07/2003
10. (notice of allowance and allowed claims enclosed)		Publ. No. 2004-0110805 (Appl. No. 10/657,034), including allowed claims and 7/21/04 notice of allowance		Freskos et al.	514/256	09/05/2003
11. (pending claims enclosed)		Publ. No. 2004-0235818 (Appl. No. 10/747,796), including pending claims		Barta et al.	514/315	12/29/2003

Examiner:	Date Considered:

X().

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 4

ATTORNEY DOCKET NO.	SERIAL NO.	
3124/9A/US (Pfizer Ref. 31134A/USA)	10/730,403	
APPLICANT		
Thomas E. Barta et al.		
FILING DATE	GROUP	
December 8, 2003	1625	

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
12. (enclosed)	I .	Pending claims from Appl. No. 10/992,483		Freskos et al.	ТВА	11/07/2004

FOREIGN P	ATENT DOC	UMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translati Yes	on No
13.		EP 0 266 182	5/4/1988	Europe	C07D 307/32	100	
. 14.		EP 0 606 046	7/13/1994	Europe	C07D 213/42		
15.		EP 0 780 386	6/25/1997	Europe	C07D 309/08		
16.		EP 0 930 067	7/21/1999	Europe	A61K 31/40		
17.		EP 1 081 137	3/7/2001	Europe	C07D 211/96		
18. (partial translation enclosed)		JP 4-338331	11/25/1992	Japan	A61K 31/365	partial	
19.		WO 90/05719	5/31/1990	PCT	C07C 323/62		
20.		WO 93/20047	10/14/1993	PCT	C07C 317/44		
21.		WO 94/02466	2/3/1994	PCT	C07D 221/14		
22.		WO 94/24140	10/27/1994	PCT	C07H 13/04		
23.		WO 95/09841	4/13/1995	PCT	C07C 323/60		
24.		WO 95/13289	5/18/1995	PCT	C07K 5/062		
25.		WO 95/29892	11/09/1995	PCT	C07D 207/327		

Examiner:	Date Considered:	
Examinor.	Date Considered.	

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 3 of 4

ATTORNEY DOCKET NO.	SERIAL NO.
3124/9A/US (Pfizer Ref. 31134A/USA)	10/730,403
APPLICANT	
Thomas E. Barta et al.	
FILING DATE	GROUP
December 8, 2003	1625

FOREIGN	PATENT DOC	J MENTS			-		
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translati Yes	ion No
26.		WO 96/06074	2/29/1996	PCT	C07C 259/06		
• 27.		WO 96/11209	4/18/1996	PCT	C07K 5/06		
. 28.		WO 97/20824	6/12/1997	PCT	C07D 241/04		
29.		WO 97/24117	7/10/1997	PCT	A61K 31/19		
30.		WO 98/37877	9/3/1998	PCT	A61K 31/16		
° 31.		WO 98/38163	9/3/1998	PCT	C07C 323/60		
32.		WO 99/09000	2/25/1999	PCT	C07C 235/00		
33.		WO 99/25687	5/27/1999	PCT	C07D 211/66		
34.		WO 99/42436	8/26/1999	PCT	C07C 239/14		
35.		WO 00/46221	8/10/2000	PCT	C07D 405/12		
36.		WO 00/50396	8/31/2000	PCT	C07D 211/66		-
37.		WO 00/59874	10/12/2000	PCT	C07C 259/06		
38.		WO 00/69821	11/23/2000	PCT	C07D 211/66		

OTHER	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)						
Ref. Desig.	Examiner's Initials						
39.		Brown, P.D., "Synthetic Inhibitors of Matrix Metalloproteinases," in <i>Matrix Metalloproteinases</i> , pp. 243-61 (Edited by Parks, W.C. & Mecham, R.P., Academic Press, San Diego, CA 1998).					
40.		Dack, et al., Preparation of N-hydroxytetrahydropyridylsulfonylacetamides and related compounds as matrix metalloprotease inhibitors, CA 131:44740 (1999) [CA Plus Accession No. 1999:388166]					

Examiner:	Date Considered:	

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 4 of 4

ATTORNEY DOCKET NO.	SERIAL NO.	
3124/9A/US (Pfizer Ref. 31134A/USA)	10/730,403	
APPLICANT		
Thomas E. Barta et al.		
FILING DATE	GROUP	
December 8, 2003	1625	

Ref. Desig.	Examiner's Initials	
41.		Denis et al., Matrix metalloproteinase inhibitors: Present achievements and future prospects, INVEST. NEW DRUGS, 15:175-185 (1997).
42.		Gearing et al., Processing of tumour necrosis factor-a precursor by metalloproteinases, NATURE, 370:555-557 (1994).
43.		Kenyon et al., A model of angiogenesis in the mouse cornea, INVEST. OPHTHALMOL. VIS. Sci., 37(8):1625-1632 (1996).
44.		Knight et al., A novel coumarin-labelled peptide for sensitive continuous assays of the matrix metalloproteinases, FEBS LETT., 296(3):263-266 (1992).
• 45.		Luckow et al., Efficient generation of infectious recombinant baculoviruses by site-specific transposon-mediated insertion of foreign genes into a baculovirus genome propagated in escherihia coli, J. VIROL., 67:4566-4579 (1993).
[°] 46.		McClure, et al., Matrix metalloprotease (MMP)-13 selective inhibitors for treatment of arthritis deformans and other MMP-related diseases, CA 131:125454 (1999) [CA Plus Accession No. 1999:468334]
47.		McGeehan et al., Regulation of tumour necrosis factor-α processing by a metalloproteinase inhibitor, NATURE, 370:558-561 (1994).
48.		Mitchell et al., Cloning, expression, and type II collagenolytic activity of matrix metalloproteinase-13 from human osteoarthritic cartilage, J. CLIN. INVEST. 97(3):761-768 (1996).
49.		Rasmussen et al., Matrix metalloproteinase inhibition as a novel anticancer strategy: a review with special focus on batimastat and marimastat, PHARMACOL. THER., 75(1):69-75 (1997).
50.		Reboul et al., The new collagenase, collagnease-3, is expressed and synthesized by human chondrocytes but not by synoviocytes, J. CLIN. INVEST., 97(9):2011-2019 (1996).
51.		Schwartz et al., Synthetic inhibitors of bacterial and mammalian interstitial collagenases, PROG. IN MED. CHEM., 29:271-334 (1992).
52.		Tang, B. L., ADAMTS: A Novel Family of Extracellular Matrix Proteases, INT. J. BIOCHEM. CELL BIO., 33(11):33-44 (2001).
53.		Woessner, J.F., "The Matrix Metalloprotease Family" in <i>Matrix Metalloproteinases</i> , pp.1-14 (Edited by Parks, W.C. & Mecham, R.P., Academic Press, San Diego, CA 1998).

Examiner:	Date Considered: